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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,895	06/08/2007	Carl R. Towns	29610/CDT498	3448
4743 7590 11/08/2010 MARSHALL, GERSTEIN & BORUN LLP 233 SOUTH WACKER DRIVE 6300 WILLIS TOWER CHICAGO, IL 60606-6357			EXAMINER CROUSE, BRETT ALAN	
			ART UNIT	PAPER NUMBER
			1786	
			NOTIFICATION DATE	DELIVERY MODE
			11/08/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mgbdocket@marshallip.com

Office Action Summary

Application No.

10/578,895

Applicant(s)

TOWNS ET AL.

Examiner

Brett A. Crouse

Art Unit

1786

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 5-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 20100614/20060510

DETAILED ACTION

Election/Restrictions

1. Claims 5-42 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 24 August 2010.
2. Applicant's election with traverse of Group III, claims 1-4 in the reply filed on 24 August 2010 is acknowledged. The traversal is on the ground(s) that there is a lack of showing on the part of the examiner with regard to a special technical feature between the inventions which is not novel over the prior art. This is not found persuasive because the compound of formula (IV) of instant claim 15 provides the special technical feature which is common to all inventions in the instant application. The prior art cited with the restriction requirement, Kabir et al., teaches the compound of formula (IV) is not novel over the prior art. A group of inventions is considered linked to form a single general inventive concept where there is a technical relationship among the inventions that involves at least one common or corresponding technical feature. Thus, there are no technical features common to the inventions which are novel over the prior art.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi et al., US 2003/0168656.

Kobayashi teaches:

As to claims 1, 2, 3:

Paragraphs [0006]-[0007], formula 1, teach a polymer comprising a repeating unit of formula 1, shown below.



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Paragraph [0009], teach groups for A¹ of formula (1). The groups include

Paragraphs [0010]-[0012], teach the substituents of R of formula (1). The substituents include alkyl, alkoxy, aryl and heteroaryl groups.

Paragraphs [0013]-[0038], teach substituents for R^1 , R^2 , R^3 , R^4 , R^5 and R^6 of formula (1).

The substituents include fluorine and fluorinated alkyl and aryl groups recited in paragraphs [0015], [0016] and [0022] respectively opposite the teaching of preferred electron withdrawing groups of page 6, lines 1-2, of the instant specification.

Paragraph [0045], provides exemplified repeat units of formula (1). Exemplified groups for R include aryl, alkyl, alkoxy and heteroaromatic groups. Exemplified groups at the 3 and 6 positions of the dibenzosilole ring include fluorine, alkyl, alkoxy and heteroaromatic groups.

As to claim 4:

Paragraph [0050], formula 7, teaches the polymer comprising the repeat unit of formula (1) can be a co-polymer. Formula (7) is reproduced below.



(7)

Paragraph [0051], teaches Ar^6 of formula (7) can be an aryl or heteroaromatic group, which can be further substituted.

Paragraphs [0054] and [0062], provide examples of aryl and heteroaromatic groups for Ar^6 of formula (7).

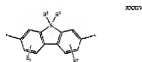
5. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Roberts et al., US 2004/0062930.

Roberts teaches:

As to claims 1, 2, 3:

Paragraphs [0007]-[0010], formulae I, II and III, teach an electroactive polymer of formula I.

Paragraph [0065], teaches exemplified groups for Ar¹ of formula I. The group can be a dibenzosilole group, shown below.



Paragraph [0065], additionally describes the substituents represented by R³ include hydrogen, alkyl, aryl, and heteroaryl. Paragraph [0065], also further teaches R³ can be fluoro, fluoroalkyl, perfluoroalkyl, alkyl, aryl and heteroaryl.

As to claim 4:

Paragraphs [0080]-[0089], formulae VI, VII, VIII, teach the electroactive polymer of formula I can be a co-polymer. Paragraphs [0083] and [0087] provide exemplified copolymeric groups for Ar³ and Ar⁴ of formulae VI, VII and VIII.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brett A. Crouse whose telephone number is (571)-272-6494. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. A. C./
Examiner, Art Unit 1786

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 1786